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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/563,656	06/22/2006	J. Christopher Anderson	54A-000510US	3238		
QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C. P O BOX 458			EXAMINER			
			GEBREYESUS, KAGNEW H			
ALAMEDA, CA 94501			ART UNIT	PAPER NUMBER		
	•		1656			
			*			
			MAIL DATE	DELIVERY MODE		
			08/10/2007	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summer		Application No. Applicant(s)		Applicant(s)		
		10/563,656		ANDERSON ET AL.		
Office Action Summar	Examiner		Art Unit			
		Kagnew H. Gebreyes		1656		
The MAILING DATE of this con Period for Reply	munication appe	ars on the cover she	eet with the co	orrespondence ad	idress	
A SHORTENED STATUTORY PERIOD WHICHEVER IS LONGER, FROM TI Extensions of time may be available under the proafter SIX (6) MONTHS from the mailing date of thi If NO period for reply is specified above, the maxir Failure to reply within the set or extended period for Any reply received by the Office later than three mearned patent term adjustment. See 37 CFR 1.70	HE MAILING DA- visions of 37 CFR 1.136 s communication. num statutory period will or reply will, by statute, conths after the mailing d	TE OF THIS COMM i(a). In no event, however, r I apply and will expire SIX (6 ause the application to become	IUNICATION may a reply be time B) MONTHS from the time ABANDONED	ely filed ne mailing date of this c		
Status						
 Responsive to communication(This action is FINAL. Since this application is in concluded in accordance with the property of the proper	2b)⊠ This a	action is non-final. ce except for formal			e merits is	
Disposition of Claims						
4) ⊠ Claim(s) 1-23 is/are pending in 4a) Of the above claim(s) 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected. 8) ⊠ Claim(s) 1-23 are subject to res	_ is/are withdrawn		n.			
Application Papers		·			•	
9) The specification is objected to 10) The drawing(s) filed on is Applicant may not request that any Replacement drawing sheet(s) incl	i/are: a) ☐ accept objection to the druding the correction	oted or b)⊡ objecte rawing(s) be held in al on is required if the dra	beyance. See awing(s) is obje	37 CFR 1.85(a). ected to. See 37 Cl	***	
Priority under 35 U.S.C. § 119		. *				
12) Acknowledgment is made of a c a) All b) Some * c) None 1. Certified copies of the pri 2. Certified copies of the pri 3. Copies of the certified co application from the Inter	of: ority documents ority documents pies of the priorit national Bureau	have been received have been received by documents have I (PCT Rule 17.2(a)).	i. I in Applicatio been received	n No: d in this National	Stage	
* See the attached detailed Office	action for a list of	i the certified copies	s not received	1.		
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Attachment(s)		🗖 .				
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Rev Information Disclosure Statement(s) (PTO/SI Paper No(s)/Mail Date 		Pape	view Summary (er No(s)/Mail Dat ce of Informal Pa er:	e		

Application/Control Number: 10/563,656

Art Unit: 1656

DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not

so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a

single invention to which the claims must be restricted.

Group 1, claim(s) 1-11, drawn to a composition comprising an orthogonal glutamyl-tRNA

(glutamyl O-tRNA), wherein the glutamyl O-tRNA comprises at least about a 50% suppression

efficiency in the presence of a cognate synthetase in response to a selector codon as compared to

the glutamyl O-tRNA corresponding to a polynucleotide sequence as set forth in SEQ ID NO .:

67 (AE(GC) tRNA).

Group 2, claim(s) 12-23 are drawn to a cell comprising a translation system, wherein the

translation system comprises: an orthogonal glutamyl-tRNA (glutamyl O-tRNA), wherein the

glutamyl O-tRNA comprises at least about a 50% suppression efficiency in the presence of a

cognate synthetase in response to a first selector codon as compared to the glutamyl O-tRNA

comprising or encoded by a polynucleotide sequence as set forth in SEQ ID NO.: 67 (AE(GC)

tRNA); an orthogonal aminoacyl-glutamyl-tRNA synthetase (glutamyl O-RS); and, a first

selected amino acid; wherein the glutamyl O-tRNA recognizes the first selector codon, and the

glutamyl O-RS preferentially aminoacylates the glutamyl O-tRNA with the first selected amino

acid.

The special technical feature linking the invention of Group I and II is an orthogonal tRNA^{Glu} corresponding to the polynucleotide sequence of SEQ ID NO: 67 with at least 50% suppression efficiency in the presence of an ORS in response to a selector codon.

However Santoro et al teach an archaebacterial-derived glutamyl-tRNA that was used to produce proteins comprising unnatural amino acid(s) in the presence of a corresponding ORS. Because the claim recitation "corresponding to" does not limit the claim to SEQ ID NO: 67, the technical feature is not a special technical feature as defined by PCT Rule 13.2.

Furthermore this application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

i) SEQ ID NO: 68 encoding the ORS of SEQ ID NO: 69, ii) SEO ID NO: 72 encoding the ORS of SEQ ID NO: 73, iii) SEQ ID NO: 74 encoding the ORS of SEQ ID NO: 75, iv) SEQ ID NO: 76 encoding the ORS of SEQ ID NO: 77.

Each of the ORS molecules comprises a structurally distinct species originating from different organisms.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

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Upon the allowance of a generic claim, applicant will be entitled to consideration of

claims to additional species which are written in dependent form or otherwise include all the

limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after

the election, applicant must indicate which are readable upon the elected species. MPEP

§ 809.02(a).

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kagnew H. Gebreyesus whose telephone number is 571-272-

2937. The examiner can normally be reached on 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kathleen Kerr Bragdon can be reached on 571-272-0931. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300. Information

regarding the status of an application may be obtained from the Patent Application Information

Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available

through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the

Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from

a USPTO Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kagnew H Gebreyesus PhD

Art Unit 1656 8/3/07

KHG.

REEZCOA E PROUTY
PRIMARY EXAMINER
GROUP 1800

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